DETERMINATION OF FLAKINESS INDEX AND ELONGATION INDEX OF COARSE AGGREGATE(IS 2386 (Part 1) 1963 (RA 2007)

Lab ID	:	CP-RW-2018-04-16-16 **Date: 19-04-18**
Customer	:	Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Sub Division, BBMP, Bangalore.
Project Name	:	Drilling of borewell and providing pipe line in Yelahanka old town area and village area in ward No.:02
Agency	:	EE(YNK.D)E-PMT-18/W.O/000132 /2017-18
Customer Reference	:	Sri.Shadayan No.:190,EWS 2nd Phase Yelahanka new town, Bangalore-64
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	16-04-18
Sample ID No	:	2018-04-16-16/01
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of test	:	16-04-18

Result:

Index	Percentage of Flakiness and Elongation Index	Secified limits as per MORTH specification table 400-12
Flakiness Index	8.9%	Combined Flakiness & Elongation Index for WMM is Maximum 35%
Elongation Index	10.5%	
Combined Flakiness and Elongation Index for WMM	19.4%	

AE-2

Note:-
The results pertain to the samples received and tested.
All information Furnished by Customer/ Representative
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate

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R KARTHIK RECHAN
Authorized Signatory
Quality Manager

End of Report

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2018-04-04-04** **Date: 07-04-18**
Customer	:	Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Sub Division, BBMP, Bangalore.
Project Name	:	Drilling of borewell and providing pipe line in Yelahanka old town area and village area in ward No.:02
Agency	:	Sri.Shadayan No.:190,EWS, 2nd Phase Yelahanka new town, Bangalore-64
Customer Reference	:	EE(YNK.D)E-PMT-18/W.O/000132 /2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	04-04-18
Sample ID No	:	2018-04-04-04 /02(b)
Sample Type/ Size	:	20mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2011 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	04-04-18

AE-2

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	254	254	5.1	94.9	90-100
3	10 mm	2435	2689	53.8	46.2	25-55
4	4.75 mm	1989	4678	93.6	6.4	0-10
5	Pan	322	5000	100	0	–

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TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : **CP-2018-04-04-04** **Date: 09-04-18**

Customer : Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore.

Address : Yelahanka Sub Division, BBMP, Bangalore.

Project Name : Drilling of borewell and providing pipe line in Yelahanka old town area and village area in ward No.:02

Agency : Sri.Shadayan No.:190,EWS, 2nd Phase Yelahanka new town, Bangalore-64

Customer's Reference : EE(YNK.D)E-PMT-18/W.O/000132 /2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 04-04-18

Sample ID No : 2018-04-04-04 /01

Sample Type : Birla Super 53grade

Reference to BIS codes : IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,
IS 4031 (Part 1,2 3,4,5, 6,11):1988
IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4
IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5
IS 4031 Part 3, Determination of Soundness, Clause 5,Clause 6
IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5
IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5
IS 4031 Part 11,DETERMINATION OF DENSITY , Clause 6

Date of test : 06-04-18

Environmental Conditions during test : Temperature: 26°C
Humidity: 72%

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	2.65	–
2	Finess by Air permeablity method (m^2/kg,Min)	289.5	225m^2/kg, Min
3	Density (gm/cc)	3.11	–
4	Standard Consistency (%)	28.0%	Not specified
5	Initial Setting time	175 minutes	Not less than 30 minutes
6	Final Setting time	270 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	1mm	Not more than 10 mm

AE: 2

Note:

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Samples will be disposed after 90 days from the date of issue of test certificate

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CIVIL PRO Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****